#### **HEALTH STATUS**

The systematic assessment of the health status of children enables health professionals to determine the impact of past and current health intervention and prevention programs. Program planners and policy-makers identify trends by examining and comparing information from one data collection year to the next. Although indicators are often assessed on an annual basis, some surveillance systems may only collect data every two, three, or five years.

In the following section, mortality, disease, injury, and health behavior indicators are presented by age groups. The health status indicators in this section are based on vital statistics and national surveys. Population-based samples are designed to yield data that are representative of the maternal and child population that are affected by, or in need of, specific health services.



#### **BREASTFEEDING**

The percentage of new mothers who began to breastfeed their babies in the hospital has increased steadily since 1990, reaching a high of 70.1 percent in 2002. Breastfeeding initiation rates have increased among all racial and ethnic groups, and especially among the populations that have traditionally been least likely to breastfeed, such as Black and Hispanic women. These increases have contributed to a substantial reduction in the gap in breastfeeding rates

between White and non-White women.

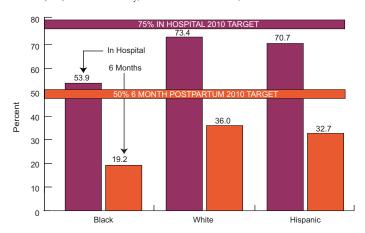
Breastfeeding rates for all women decreased substantially between delivery and 6 months postpartum, the period recommended as most critical for the infant's health by the U.S. Surgeon General. The percentage of women who report that they are still breastfeeding at 6 months postpartum reached a high of 33.2 percent in 2002. At six months postpartum, 36.0 percent, 19.2 percent, and 32.7 percent of White, Black, and Hispanic women, respectively,

were still breastfeeding.

Average breastfeeding rates were highest among women who are over 30 years of age, college educated, and not participating in the Women, Infants, and Children (WIC) supplementary food program. Overall breastfeeding rates were lowest among women under 20 years of age, Black, low-income, those with less than a high school education, and women living in the southeastern United States.

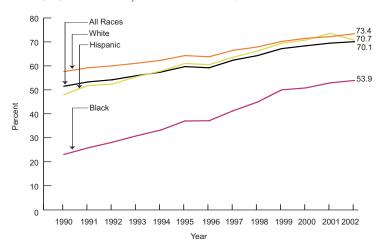
## Breastfeeding\* Rates, by Race/Ethnicity: 2002

Source (II.1): Mothers' Survey, Ross Products Division, Abbott Laboratories



## In-Hospital Breastfeeding\* Rates, by Race/Ethnicity: 1990-2002

Source (II.1): Mothers' Survey, Ross Products Division, Abbott Laboratories



<sup>\*</sup> Includes exclusive and supplemental breastfeeding.

<sup>\*</sup> Includes exclusive and supplemental breastfeeding.

#### LOW BIRTH WEIGHT

In 2002, 314,077 babies (7.8 percent of all live births) were of low birth weight, weighing less than 2,500 grams, or 5 pounds 8 ounces, at birth. This rate represented a slight increase from the previous year. The percentage of newborns born at low birth weight has risen steadily from a low of 6.7 percent in 1984 and is currently at the highest level recorded in the past three decades.

The highest rates of delivering a low birth weight infant are among mothers younger than 15 years and older than 45. Much of the incidence of low birth weight among older mothers (older than 44) is due to an increase in the proportion of multiple births, as the use of assisted reproductive technologies increases. Multiple births accounted for 24 percent of low birth weight infants in 2002 compared to only 15 percent in 1980. However, the low birth weight rate among singleton infants increased as well.

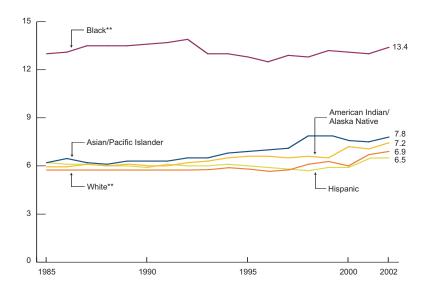
Although the non-Hispanic Black low birth weight has declined slightly from a high of 13.6 percent in 1991, it remains considerably higher than the rate for non-Hispanic White (6.9 percent) and Hispanic (6.5 percent) infants. In 2002, the percent of low birth weight infants born to smokers (12.2 percent) was substantially higher than among nonsmokers

(7.5 percent). This significant differential has been consistently observed among both non-Hispanic Black and non-Hispanic White infants. Other factors associated with increased risk of low birth weight include maternal poverty and low levels of educational attainment.

Low birth weight is one of the leading causes of neonatal mortality. Low birth weight infants are more likely to experience long-term disability or to die during the first year of life than are infants of normal weight.

## Low Birth Weight Among Infants, by Race/Ethnicity: 1985-2002\*

Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



<sup>\* 1985-1988</sup> data based on race of child; 1989-2002 data based on race of mother

\*\* Non-Hispanic

#### **VERY LOW BIRTH WEIGHT**

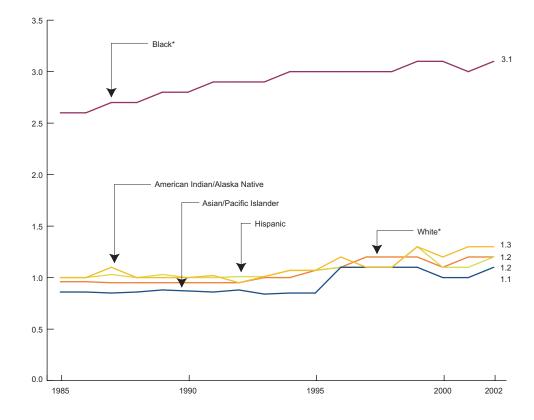
In 2002, the rate of very low birth weight (less than 1500 grams or 3 pounds 4 ounces) newborns was 1.5 percent of live births, a rate that has been relatively stable since 1997.

Because chance for survival increases as birth weight increases, infants born at a very low birth weight have the lowest survival rates. Infants born at such low birth weights are approximately 100 times more likely to die by age one than are infants of normal birth weight. Very low birth weight infants who survive are at a significantly increased risk of severe problems, including physical and visual difficulties, developmental delays and cognitive impairment requiring increased levels of medical, educational and parental care.

The overall rate of very low birth weight among non-Hispanic Black newborns is two and a half times greater than that among non-Hispanic Whites and is twice the rate of the population as a whole. This disparity is a major contributor to the disparity in infant mortality rates between non-Hispanic Black and non-Hispanic White infants.

### Very Low Birth Weight Among Infants, by Race/Ethnicity: 1985-2002

Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



<sup>\*</sup> Non-Hispanic

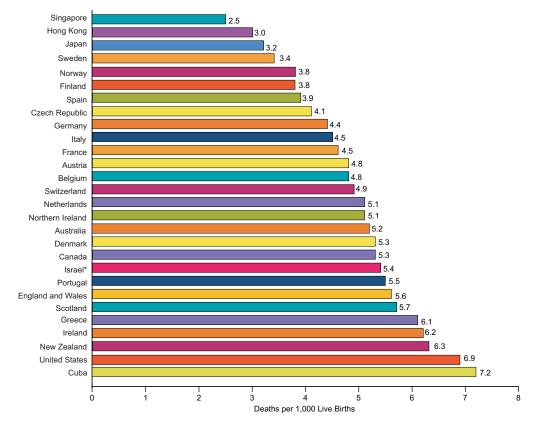
## INTERNATIONAL INFANT MORTALITY RATES

Differences in the infant mortality rates among industrialized nations reflect disparities in the health status of women before and during pregnancy, as well as the quality and accessibility of primary care for pregnant women and their infants. Although the United States has greatly reduced its infant mortality rate since 1965, the nation ranked 27th among industrialized nations in 2000.

This graph comparing international infant mortality rates includes countries, territories, cities, or geographic areas with a population of at least 1 million that have complete counts of live births and infant deaths. In 2000, four of these jurisdictions had infant mortality rates less than half that of the United States.

## **Comparison of International Infant Mortality Rates: 2000**

Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics



<sup>\*</sup> Includes data for East Jerusalem and Israeli residents in certain other territories under occupation by Israel military forces since June 1967 Child Health USA 2004

#### INFANT MORTALITY

In 2002, 27,970 infants died before their first birthday. The infant mortality rate was 7.0 deaths per 1,000 live births, representing a small but significant increase from the previous year, the first such increase in 40 years. The leading causes of infant mortality include birth defects, low birth weight and prematurity, and pregnancy complications. Approximately 25 percent of the increase in infant mortality is due to multiple births.<sup>1</sup>

The rapid decline in infant mortality, which began in the mid-1960's, slowed among both Blacks and Whites during the 1980's. Major advances, including the approval of synthetic surfactants and the recommendation that infants be placed on their backs when sleeping, may have contributed to a renewed decline during the 1990's. In 2002, the leading cause of infant mortality was congenital malformations, deformations and chromosomal abnormalities, which accounted for 20.2 percent of infant deaths.

Based on preliminary data, mortality among non-Hispanic Black infants remained stable at 13.9 deaths per 1,000 live births in 2002. The rate of 5.8 deaths per 1,000 live births among non-Hispanic White infants represented a slight increase over the rate in 2001. The infant mortality rate for non-Hispanic Black infants

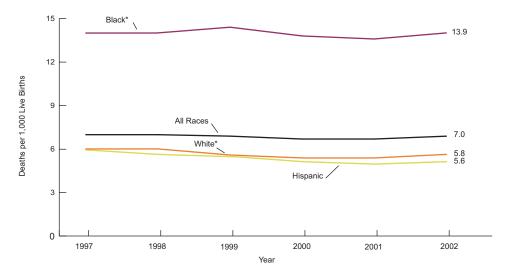
continues to be 2.5 times that of non-Hispanic White infants. Although the trend in infant mortality rates among non-Hispanic Blacks and non-Hispanic Whites has generally declined throughout the 20<sup>th</sup> century, the proportional discrepancy between the non-Hispanic Black and non-Hispanic White rates remains largely unchanged.

The Maternal and Child Health Block Grant and the MCHB's Healthy Start Program provide health and support services to pregnant women and infants with the goal of reducing infant mortality rates.

1 MacDorman MF et al. Explaining the 2001-02 Infant Mortality Increase: Data from the Linked Birth/Infant Death Set. NVSR 2005; 53(12).

## U.S. Mortality Rates Among Infants, by Race/Ethnicity of Mother, 1997-2002

Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



<sup>\*</sup> Non-Hispanic

# NEONATAL AND POSTNEONATAL MORTALITY

#### Neonatal

In 2002, 18,791 infants younger than 28 days died, resulting in a neonatal mortality rate of 4.7 deaths per 1,000 live births. This neonatal mortality rate represents a small increase from the rate recorded in 2001.

Neonatal mortality is generally related to congenital anomalies and disorders resulting from preterm delivery and low birth weight.

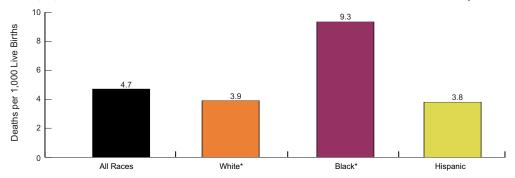
#### **Postneonatal**

In 2002, 9,179 infants between 28 days and 1 year of age died; the postneonatal mortality rate was 2.3 deaths per 1,000 live births. The 2002 rate is not different from the 2001 rate.

The leading causes of postneonatal mortality in 2002 were Sudden Infant Death Syndrome and congenital anomalies.

## Neonatal Mortality Rates, by Race/Ethnicity of Mother: 2002

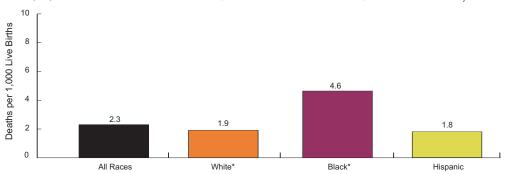
Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



<sup>\*</sup> Non-Hispanic

## Postneonatal Mortality Rates, by Race/Ethnicity of Mother: 2002

Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



<sup>\*</sup> Non-Hispanic

#### MATERNAL MORTALITY

During the past several decades, the rate of maternal mortality in the United States has declined dramatically. Since 1982, however, the maternal mortality rate has not declined significantly.

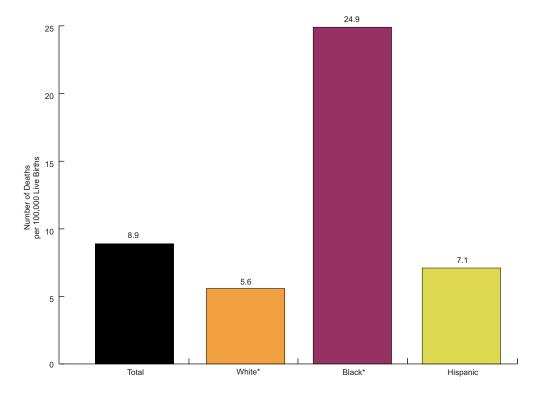
In 2002, 357 maternal deaths resulted from complications during pregnancy, childbirth, or up to 42 days postpartum. The maternal mortality rate of 8.9 per 100,000 live births was not significantly different from those reported in recent years.

The maternal mortality rate among non-Hispanic Black women (24.9 per 100,000 live births) is more than four times the rate among non-Hispanic White women (5.6 per 100,000 live births). This disparity has widened since 2000.

According to the National Center for Health Statistics, the risk of maternal death increases for women over age 30, regardless of race. Women aged 35-39 years have over three times the risk of maternal death as women aged 20-24 years.<sup>1</sup>

## Maternal Mortality Rates, by Race/Ethnicity: 2002

Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



<sup>1</sup> National Center for Health Statistics. Health, United States, 2004. Hyattsville, Maryland: 2004.